

## ABSTRACT

System and methods for life testing laser diodes is disclosed. The system includes a burn-in rack having a plurality of optoelectronic devices mounted within respective holders and electrical signal connectors that electrically couple the optoelectronic devices to a first electrical connector. A test apparatus holds the burn-in rack and has optical detectors arranged to receive electromagnetic radiation from the mounted optoelectronic devices and couple the output signals from the optical detectors to a second electrical connector. A computer electrically communicates with the connectors and generates a drive current deliverable to each optoelectronic device and receives data from the optical detectors that is based upon the output from each optoelectronic device. The measured optical power output from each optoelectronic device is stored at the computer and following analysis the optoelectronic devices are either removed from the rack or subjected to additional burn-in processes.